Calibrating "*Miniature Steam*" Ceramic Burners

As used on 2",3" & 4" Boilers

Please note that "Miniature Steam" ceramic burners are only to be used with a Butane/Propane gas mix with a maximum of 30% Propane or Butane/ISO Butane/Propane mix

LPG (100% propane) should NOT be used)

"Miniature Steam" ceramic burners are specifically designed to provide optimum burning characteristics in enclosed spaces such as the centre flue or firebox of a boiler. They differ from other ceramic burners made from heating tiles designed for radiant room heaters.

The gas/air mixture of a ***"Miniature Steam"*** ceramic burner burns outside the ceramic insert (see picture). This results in a more efficient transfer of heat to the boiler's heating surface. The burner also remains relatively cool thus improving the thermal efficiency of the burner and minimizing the chance of back burning.

As the gas supply may vary by location and from batch to batch, it is advisable to undertake a calibration process before starting up a boiler for the first time and when changing gas batches.

To achieve the correct burning characteristics of the unit with any gas batch, the jet holder is moved in the air/gas mixing tube to establish a correct air/gas ratio in the fire tube.

We recommend the following procedure

- connect the gas source to the burner gas pipe and insert the jet holder into the mixer gas tube
- remove the burner assembly from the boiler and hold it in one hand by the mixer gas tube. (Note: keep your fingers away from the burner shroud – it may heat uncomfortably during the calibration process!)
- start by sliding the jet holder in the mixer gas tube to leave the air holes 2/3 closed.
- turn on the gas and light the burner. You should see a lazy flame flecked with yellow. If not, adjust the jet holder to achieve this. This position indicates that insufficient air is being added to the gas/air mix.
- slide the jet holder to expose more of the air holes until the flame is blue but is "dancing" on the surface of the burner. This indicates that there is too much air in the gas/air mix.
- move the jet holder back to reduce the air hole exposure until a stable blue flame is evident. This is the optimum setting for the air/gas mixture.
- secure the jet holder in the mixer gas tube in this position with the Allen key supplied by tightening the stainless steel 3 mm grub screw provided.
- turn the gas off and allow the burner to cool a little before reinserting it in the boiler fire tube.

The burner is normally lit by turning on the gas and applying a lighted match to the boiler chimney.

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